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Additional data structures for Monitor utility-  
Version 'V04-000'\*\*\*\*\*  
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FACILITY: VAX/VMS MONITOR Utility

## ABSTRACT:

This module contains the definition of the PMS\$C.....  
item identifiers used in the BLDIDB macros in the MONDAT.MAR  
module. Every data item included in a Monitor class must  
have an item identifier in this module.

ENVIRONMENT: Non-executable data structures.

AUTHOR: H. M. Levy , CREATION DATE: 2-May-1977

## MODIFIED BY:

V03-010	TLC1066	Thomas L. Cafarella	01-Apr-1984	11:00
	Add SYSTEM class.			
V03-009	PRS1010	Paul R. Senn	27-Feb-1984	9:00
	Add Deadlock Message Rate to DLOCK class			
V03-009	PRS1009	Paul R. Senn	22-FEB-1984	14:00
	Add Internal-use-only VMS1 Class			



V03-009	PRS1007	Paul R. Senn	17-FEB-1984	14:00
	Misc. changes to XQPCACHE and FCP classes			
V03-008	PRS1004	Paul R. Senn	11-JAN-1983	16:00
	Misc. changes to POOL class			
V03-007	TLC1050	Thomas L. Cafarella	06-Dec-1983	11:00
	Change directory information in DLOCK class.			
V03-006	SPC0004	Stephen P. Carney	24-Jun-1983	16:00
	Add SCS class.			
V03-005	TLC1035	Thomas L. Cafarella	06-Jun-1983	15:00
	Add homogeneous class type and DISK class.			
V03-005	TLC1034	Thomas L. Cafarella	06-Jun-1983	15:00
	Add DLOCK class.			
V03-005	SPC0003	Stephen P. Carney	06-Jun-1983	15:00
	Add JDEVICE class.			
V03-004	TLC1032	Thomas L. Cafarella	27-May-1983	15:00
	Add Blocking AST Rate to LOCK class.			
V03-003	SPC0002	Stephen P. Carney	22-Apr-1983	14:00
	Add ACPCACHE class.			
V03-002	TLC1028	Thomas L. Cafarella	14-Apr-1983	16:00
	Add interactive user interface.			
V03-002	TLC1026	Thomas L. Cafarella	14-Apr-1983	16:00
	Miscellaneous updates to JOURNALING, RU and FCP classes			
V03-001	TLC1022	Thomas L. Cafarella	12-Jul-1982	16:00
	Add item identifiers for the JOURNALING and RECOVERY classes.			

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: Define item identifier numbers. Each data item has an associated
: value which is used to find its IDB in the item table (PERFTABLE).
: The item table is defined by BLDIDB macros in the module MONDAT.MAR.
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## \$STRUCT PMS

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C<
PINTERRUPT      : time on interrupt stack -- primary
PKERNEL         : time in kernel mode -- primary
PEXEC           : time in exec mode -- primary
PSUPER          : time in supervisor mode -- primary
PUSER           : time in user mode -- primary
PCOMPAT         : time in compat. mode -- primary
PIDLE           : idle time -- primary
SINTERRUPT      : time on interrupt stack -- secondary
SKERNEL         : time in kernel mode -- secondary
SEXEC           : time in exec mode -- secondary
SSUPER          : time in supervisor mode -- secondary
SUSER           : time in user mode -- secondary
SCOMPAT         : time in compat. mode -- secondary
SIDLE           : idle time -- secondary
CPUBUSY         : all modes except idle
COLPG           : collided page wait
MWAIT           : memory wait
CEF             : common event flag wait
PFW             : page wait
LEF             : local event flag wait
LEFO            : lef wait out of bal. set
HIB             : hibernating
HIBO            :
SUSP            : suspended
SUSPO           :
FPG             :
COM             : computing
COMO            :
CUR             : current
OTHSTAT         : "other states" for SYSTEM class
PROCS           : process count for SYSTEM class
FRLIST          : size of free list
MODLIST         : size of modified list
FAULTS          : page fault count
PREADS          : page reads
PWRITES         : page writes
PWRITIO         : physical page write I/O's
PREADIO         : physical page read I/O's
GVALFLTS       : global valid faults
WRTINPROG       : faults from write in progress
FREFLT          : faults from free list
MFYFLT          : faults from modified list
DZROFLT         : demand zero faults
SYSFAULTS       : system page faults
LRPCNT          : number of LRP packets available
LRPINUSE        : number of LRPs in use
IRPCNT          : number of IRP packets available

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IRPINUSE	: number of IRPs in use
SRPCNT	: number of SRP packets available
SRPINUSE	: number of SRPs in use
HOLECNT	: number of blocks in dyn. memory
BIGHOLE	: largest hole
SMALLHOLE	: smallest hole
HOLESUM	: total space in dyn. memory available
DYNINUSE	: dynamic memory space in use
SMALLCNT	: number of blocks < 32 bytes in size
ISWPCNT	: total inswaps
DIRIO	: count of direct I/Os
BUFIO	: count of buffered I/Os
MBREADS	: total mailbox reads
MBWRITES	: total mailbox writes
LOGNAM	: logical name translations
ACCESS	: number of file accesses
ALLOC	: number of file extends
FCPCALLS	: total fcp calls
FCPCREATE	: number of file creations
FCPREAD	: number of disk reads by FCP
FCPWRITE	: number of disk writes by FCP
FCPCACHE	: number of FCP cache hits
VOLWAIT	: # of times XQP waited for volume lock
FCPCPU	: number of CPU tics by FCP
FCPTURN	: number of window turns
FCPHIT	: number of window hits
FCPSPLIT	: number of split transfers
FCPFAULT	: number of FCP page faults
FCPERASE	: number of erase calls
OPENS	: number of file opens
ENQNEW	: number of ENQ's (new)
ENQCVT	: number of ENQ's (conversions)
DEQ	: number of DEQ's
BLKAST	: number of blocking AST's
ENQWAIT	: number of ENQ's forced to wait
ENQNOTQD	: number of ENQ's not queued
DLCKSRCH	: number of deadlock searches
DLCKFND	: number of deadlocks found
NUMLOCKS	: total locks
NUMRES	: total resources
ARRLOCPK	: arriving local packets
DEPLOCPK	: departing local packets
ARRTRAPK	: arriving transit packets
TRCNGLOS	: transit congestion loss
RCVBUFFL	: receiver buffer failures
JNLJRNLS	: active journals
JNLCHNLS	: journal channels assigned
JNLWRTAI	: AI journal write operations
JNLWRTBI	: BI journal write operations
JNLWRTAT	: AT journal write operations
JNLWRTRU	: RU journal write operations
JNLDIRIO	: journal direct I/Os
JNLBUFIO	: journal buffered I/Os
JNLWRTSS	: journal write operations to sec stg
JNLFORN	: force writes -- NULL operation
JNLFORFL	: force writes -- flushed



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JNLBUFWR      : journal buffer-writes
JNLWRTFM      : force modifier writes
RUFACTIV      : active recovery units
RUFJNLS       : active RU journals
RUFCHNLS      : RU journal channels
RUFWRTS       : RU journal writes
RUFREADS      : RU journal reads
RUFXTNDS      : RU journal extends
RUFMARK       : count of Mark IDs written
RUFMRKRB      : count of Mark ID rollbacks
RUFABORT      : count of RU abort operations
FIDHITPCNT    : Percentage of File id cache hits/hits+misses
FIDHIT        : count of File id cache hits
FID TRIES     : count of File id cache attempts
FIDMISS       : count of File id cache misses
FILHDR_HITPCNT : Percentage of File header cache hits/hits+misses
FILHDR_HIT    : count of File header cache hits
FILHDR_TRIES  : count of File header cache attempts
DIRFCB_HITPCNT : Percentage of Directory block cache hits/hits+misses
DIRFCB_HIT    : count of Directory block cache hits
DIRFCB_TRIES  : count of Directory block cache attempts
DIRFCB_MISS   : count of Directory block cache misses
DIRDATA_HITPCNT : Percentage of Directory data cache hits/hits+misses
DIRDATA_HIT   : count of Directory data cache hits
DIRDATA_TRIES : count of Directory data cache attempts
EXTHITPCNT    : Percentage of Extent cache hits/hits+misses
EXTHIT        : count of Extent cache hits
EXT TRIES     : count of Extent cache attempts
EXTMISS       : count of Extent cache misses
QUOHITPCNT    : Percentage of Quota cache hits/hits+misses
QUOHIT        : count of Quota cache hits
QUO TRIES     : count of Quota cache attempts
QUOMISS       : count of Quota cache misses
STORAGMAP_HITPCNT : Percentage of storage bitmap cache hits/hits+misses
STORAGMAP_HIT : count of storage bitmap cache hits
STORAGMAP_TRIES : count of storage bitmap cache attempts
OPCNT         : disk i/o operation count
IOQUELEN      : i/o queue length (used by DISK & JDEV)
JNLIOCNT      : journaling i/o op'n count (for DISK)
JDNQLEN       : device normal IRP queue length
JDWQLEN       : device wait IRP queue length
JDFQLEN       : device force IRP queue length
JDEXCNT       : device extend count

ENQNEWLOC     : new lock requests (local)
ENQNEWIN      : new lock requests (incoming)
ENQNEWOUT     : new lock requests (outgoing)
ENQCVTLOC     : lock conversion requests (local)
ENQCVTIN      : lock conversion requests (incoming)
ENQCVTOUT     : lock conversion requests (outgoing)
DEQLOC        : dequeues (local)
DEQIN         : dequeues (incoming)
DEQOUT        : dequeues (outgoing)
BLKLOC        : blocking ASTs queued (local)
BLKIN         : blocking ASTs queued (incoming)
BLKOUT        : blocking ASTs queued (outgoing)

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DIRLOOK	: directory lookups
DIRINS	: directory inserts
DIRDEL	: directory deletes
DIRIN	: directory operations (incoming)
DIROUT	: directory operations (outgoing)
DLCKMSG	: deadlock detection messages (in & out)
DGSENT	: SCS application datagrams sent
DGRCVD	: SCS application datagrams received
DGDISCARD	: SCS application datagrams discarded
MSGSENT	: SCS application messages sent
MSGRCVD	: SCS application messages received
SNDATS	: SCS block send datas initiated
KBYTSENT	: SCS kbytes sent via send datas
REQDATS	: SCS block request datas initiated
KBYTREQD	: SCS kbytes received via request datas
KBYTHAPD	: SCS kbytes mapped for block xfr
QCR_CNT	: SCS times conn. q'd for send credit
QBDT_CNT	: SCS times conn. q'd for buff descr
VOLLCK	: Volume synch locks
SYNCHLCK	: directory and file synch locks
SYNCHWAIT	: # of times XQP waited for a
	: directory or file synch lock
ACCLCK	: access locks
XQPCACHEWAIT	: # of times XQP had to wait for free
	: space in a cache

: the following must be the last entry  
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TABLESIZE	: for allocating table space in
	: PERFTABLE

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